Collatz

The Collatz Conjecture states that if, given any positive integer n, modifying n according to the method below will eventually lead to n = 1.

```
while n ≠ 1:
    if n is even:
        n = n / 2 #remove decimal
    else:
        n = 3n + 1
```

So far, no matter what positive integer is chosen for n, it always ends up at 1. This exercise isn't interested in proving the conjecture, but is interested in modifying the value until it reaches 1.

Input

A positive integer n.

Output

The sequence of transforming n to 1 with the method above. Display only the last 15 steps (or less if there are less than 15 steps). Separate each value with ->. (see example below)

Input (from keyboard)	Output (on screen)
10	10->5->16->8->4->2->1
18	11->34->17->52->26->13->40->20->10->5->16->8->4->2->1

In the case of n = 18, the full sequence is:

18->9->28->14->7->22->11->34->17->52->26->13->40->20->10->5->16->8->4->2->1

However, only the last 15 steps are shown.